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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,475	04/15/2004	Garrie David Huisenga	R11.12-0856	8126

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EXAMINER

NGUYEN, MATTHEW VAN

ART UNIT PAPER NUMBER

2838

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/825,475

Applicant(s)

HUISENGA ET AL.

Examiner

MATTHEW V. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-14, 16-19 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 5-7, 15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/15, 9/2, 11/24/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

1. The disclosure should be carefully reviewed and ensure that any and all grammatical, idiomatic, and spelling or other minor errors are corrected.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 10-13, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Shires (U.S. Pat. No. 6,178,101).

With regard to claims 1, 10-13, 23 and 24, Shires (i.e., Fig. 1) shows a process field device for coupling to a two wire (12, 14) process control loop and a method therefor comprising a field device circuitry (load at outputs +200, -200 VDC), a switching regulator (30, 32) for powering the field device circuitry, a bulk capacitor (22) coupled to an input of the switching regulator for providing power to the switching regulator, a series voltage regulator (18, 19) for providing a regulated supply voltage to the bulk capacitor, a noise filter (16) coupling the series voltage regulator to the two wire process control loop for powering the series voltage regulator with power from two wire process control loop and to block noise from the switching regulator from entering thereof, the series voltage regulator including an operational amplifier (in element 116 of Fig. 4) with a capacitor (also in element 116) for providing negative feedback to the operational amplifier.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 8, 14, 16-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shires in view of Bondreaux, Jr. et al. (U.S. Pat. No. 6,489,755).

With regard to claims 2-4, 8, 14, 16-19 and 21, Shires shows a process field device for coupling to a two wire process control loop and a method therefor comprising all the claimed subject matter as discussed above in subparagraph 2, except for a capacitor and an active component being a field effect (FET) transistor included in the noise filter.

Bondreaux, Jr. et al. discloses an active ripple and noise filter for a power supply system (i.e., Fig. 3) in which a capacitor (33) and an FET transistor (70) are included.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the capacitor and the FET transistor included in the noise filter as shown by Bondreaux Jr. et al. into the power system of Shires for the purpose of enhancing the efficiency of reducing noise from the power supply source.

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4. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shires and Bondreaux, Jr. et al. as applied to claims 1 and 12 above, and further in view of Official Notice.

With regard to claims 9 and 22, Shires (i.e., Fig. 1) in view of Bondreaux, Jr. et al. show a process field device for coupling to a two wire process control loop and a method therefor comprising all the claimed subject matter as discussed above in subparagraph 3, except for two FET transistors and two capacitors being included in the noise filter (whereas, one FET transistor and one capacitor are disclosed in Bondreaux, Jr. et al., instead).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have two capacitors and two FET transistors in the noise filter, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis paper Co. v. Bemis co.*, 193 USPQ 8.

5. Claims 5-7, 15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of prior art of record taken alone or in combination shows a first terminal of the active component coupling to the two wire process control loop, a second terminal thereof coupling to the bulk capacitor and a third terminal coupling to the series voltage regulator (as recited in claims 5-7 and 15); or a first terminal of the

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active component coupling to the two wire process control loop, a second terminal thereof coupling to the one side of the capacitor and a third terminal coupling to another side of the capacitor (as recited I claim 20).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Deller et al. (U.S. Pat. No. 6,313,616), Bert et al. (U.S. Pat. No. 6,646,362) and Bron (U.S. Pat. No. 6,806,693) also disclose power supply systems each of which comprises substantial elements as recited in the claims of the instant application.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew V. Nguyen whose telephone number is (571) 272-2081.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2800.

*Matthew V. Nguyen*  
MATTHEW V. NGUYEN  
PRIMARY EXAMINER